

National Stage Entry of PCT/JP03/08374
Preliminary Amendment

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

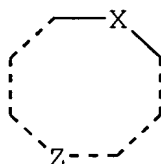
1. (original): An inkjet recording ink comprising an aqueous medium having dissolved and/or dispersed therein at least one dye having λ_{\max} in a region of from 390 to 470 nm and having a ratio of an absorbance $I(\lambda_{\max}+70 \text{ nm})$ at $\lambda_{\max}+70 \text{ nm}$ to an absorbance $I(\lambda_{\max})$ at λ_{\max} , namely, $I(\lambda_{\max}+70 \text{ nm})/I(\lambda_{\max})$, of 0.4 or less, wherein when a reflection density after printing an image with the ink on a reflective image-receiving medium is measured through a Status A blue filter and a point having a reflection density (D_B) of 0.90 to 1.10 in a yellow region is defined as an initial density of the ink and when the printed image is enforcedly discolored by using an ozone discoloration tester capable of always generating 5 ppm of ozone and an enforced discoloration rate constant is determined from a time until the reflection density decreases to 80% of the initial density, the enforced discoloration rate constant is $5.0 \times 10^{-2} [\text{hour}^{-1}]$ or less.

2. (original): The inkjet recording ink as claimed in claim 1, wherein the ratio of the absorbance $I(\lambda_{\max}+70 \text{ nm})$ at $\lambda_{\max}+70 \text{ nm}$ to the absorbance $I(\lambda_{\max})$ at λ_{\max} , namely, $I(\lambda_{\max}+70 \text{ nm})/I(\lambda_{\max})$, is 0.2 or less.

3. (currently amended): A yellow ink for inkjet recording as claimed in claim 1 ~~or 2~~, wherein an oxidation potential of the dye is nobler than 1.0 V (vs SCE).

4. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 3,
which comprises at least one compound represented by the following formula (A):

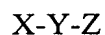
Formula (A):



wherein X represents a carbonyl- or heteroatom-containing group and Z represents an atomic group capable of constituting a cyclic organic material.

5. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 4,
which comprises at least one compound represented by the following formula (B):

Formula (B):



wherein X represents a group represented by $-N(Q_1)-Q_2$, Z represents a group represented by $-N(Q_1)-Q_2$ or $-O-Q_3$, Y represents a group represented by $-W-(G)_k-(H)_n-$, W and H each represents a group represented by $-CO-$, $-SO_2-$ or $-PO(Q_4)-$, G represents a divalent linking group, Q_1 to Q_4 each represents a hydrogen atom, an amino group, an alkyl group, an alkenyl group, an alkynyl group, an aryl group, a heterocyclic group, a heteroaryl group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a heteroaryloxy group, an alkylamino group, an arylamino

group, a heterocyclic amino group or a heteroaryl amino group, X and Z may combine with each other to form a ring, and k and n each represents 0 or 1.

6. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 5, which comprises at least one antiseptic.

7. (original): The inkjet recording ink as claimed in claim 5, which comprises two or more different antiseptics.

8. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 7, which comprises an organic solvent having a boiling point of 150°C or more.

9. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 8, which comprises at least one organic solvent having a boiling point of 150°C or more and at least one organic solvent having a boiling point of less than 150°C.

10. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 9, wherein at least one organic solvent having a boiling point of 150°C or more is an alcohol derivative.

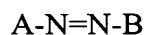
11. (original): The inkjet recording ink as claimed in claim 9, wherein at least one organic solvent having a boiling point of less than 150°C is an alcohol derivative.

12. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 11, which comprises at least one organic solvent not containing a heteroatom other than an oxygen atom.

13. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 1 to 12, wherein a water-miscible organic solvent in which the dye has a solubility of 10 (g/100 g-solvent) or more at 25°C is contained in an amount of 10 mass% or less based on a composition of the ink.

14. (original): An inkjet recording ink comprising an aqueous medium having dissolved and/or dispersed therein at least one dye having λ_{max} in a region of from 390 to 470 nm and represented by the following formula (1):

Formula (1):



wherein A and B each independently represents a heterocyclic group which may be substituted.

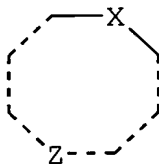
15. (original): The inkjet recording ink as claimed in claim 14, wherein an enforced discoloration rate constant of the ink for an ozone gas determined in a region of an image printed with the ink on a reflective image-receiving medium is 5.0×10^{-2} [hour⁻¹] or less.

16. (currently amended): The inkjet recording ink as claimed in claim 14 ~~or 15~~, wherein a ratio of an absorbance $I(\lambda_{\max}+70 \text{ nm})$ at $\lambda_{\max}+70 \text{ nm}$ to an absorbance $I(\lambda_{\max})$ at λ_{\max} , namely, $I(\lambda_{\max}+70 \text{ nm})/I(\lambda_{\max})$, is 0.4 or less.

17. (original): The inkjet recording ink as claimed in claim 16, wherein the ratio of the absorbance $I(\lambda_{\max}+70 \text{ nm})$ at $\lambda_{\max}+70 \text{ nm}$ to the absorbance $I(\lambda_{\max})$ at λ_{\max} , namely, $I(\lambda_{\max}+70 \text{ nm})/I(\lambda_{\max})$, is 0.2 or less.

18. (currently amended): The yellow ink for inkjet recording as claimed in ~~any one of~~ claims 14 ~~to 17~~, wherein an oxidation potential of the dye is nobler than 1.0 V (vs SCE).

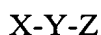
19. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 14 ~~to 18~~, which comprises at least one compound represented by the following formula (A):
Formula (A):



wherein X represents a carbonyl- or heteroatom-containing group and Z represents an atomic group capable of constituting a cyclic organic material.

20. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 14 to 19, which comprises at least one compound represented by the following formula (B):

Formula (B):



wherein X represents a group represented by $-N(Q_1)-Q_2$, Z represents a group represented by $-N(Q_1)-Q_2$ or $-O-Q_3$, Y represents a group represented by $-W-(G)_k-(H)_n-$, W and H each represents a group represented by $-CO-$, $-SO_2-$ or $-PO(Q_4)-$, G represents a divalent linking group, Q_1 to Q_4 each represents a hydrogen atom, an amino group, an alkyl group, an alkenyl group, an alkynyl group, an aryl group, a heterocyclic group, a heteroaryl group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a heteroaryloxy group, an alkylamino group, an arylamino group, a heterocyclic amino group or a heteroaryl amino group, X and Z may combine with each other to form a ring, and k and n each represents 0 or 1.

21. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 14 to 20, which comprises at least one antiseptic.

22. (original): The inkjet recording ink as claimed in claim 21, which comprises two or more different antiseptics.

23. (currently amended): The inkjet recording ink as claimed in ~~any one of~~ claims 14 to 21, which comprises an organic solvent having a boiling point of 150°C or more.

24. (currently amended): The inkjet recording ink as claimed in ~~any one of claims 14 to 23~~, which comprises at least one organic solvent having a boiling point of 150°C or more and at least one organic solvent having a boiling point of less than 150°C.

25. (currently amended): The inkjet recording ink as claimed in claim 23 ~~or 24~~, wherein at least one organic solvent having a boiling point of 150°C or more is an alcohol derivative.

26. (original): The inkjet recording ink as claimed in claim 24, wherein at least one organic solvent having a boiling point of less than 150°C is an alcohol derivative.

27. (currently amended): The inkjet recording ink as claimed in ~~any one of claims 14 to 26~~, which comprises at least one organic solvent not containing a heteroatom other than an oxygen atom.

28. (currently amended): The inkjet recording ink as claimed in ~~any one of claims 14 to 27~~, wherein a water-miscible organic solvent in which the dye has a solubility of 10 (g/100 g-solvent) or more at 25°C is contained in an amount of 10 mass% or less based on a composition of the ink.

29. (currently amended): An inkjet recording method comprising using the inkjet recording ink claimed in ~~any one of claims 1 to 28~~.

30. (currently amended): An inkjet recording method comprising ejecting ink droplets according to recording signals on an image-receiving material to record an image on the image-receiving material, the image-receiving material comprising a support having thereon an image-receiving layer containing an inorganic white pigment particle, wherein the ink droplet comprises the inkjet recording ink claimed in ~~any one of claims 1 to 28~~.